Amendments to the Claims:

1. (Original) An electrical isolation system for a fuel cell stack comprising a plurality of fuel cells connected in series and a coolant circuit for cooling said fuel cells in operation using a liquid coolant having a restricted electrical conductivity, said fuel cell stack being associated with a chassis having a chassis ground and comprising a plurality of coolant passages for said fuel cells, said coolant passages being connected together and said coolant circuit comprising an inlet for feeding said liquid coolant into said stack and into said coolant passages, an outlet for removing said liquid coolant from said stack after flow through said coolant passages, a radiator provided as a heat exchanger to cool said liquid coolant and having an inlet and an outlet, a first coolant flow line connecting said radiator outlet to said fuel cell stack inlet, a second coolant flow line connecting said stack outlet to said radiator inlet and a pump for circulating liquid coolant in said coolant circuit, wherein said coolant circuit comprises a plurality of conductive components, wherein at least one of said conductive components is connected to said chassis ground and wherein a measuring circuit is provided for measuring the resistance between a selected one of said fuel cells and said chassis ground.

2.(Original) An electrical isolation system in accordance with claim 1, said coolant passages being connected together in one of the following ways: in parallel, in series, partly in parallel and partly in series.

3. (Original) An electrical isolation system in accordance with claim 1, said fuel cell stack having an outer boundary wall and said plurality of conductive components comprising at least one of said outer boundary wall, said radiator and said pump.

4. (Original) An electrical isolation system in accordance with claim 1, wherein the selected one of said fuel cells is the fuel cell closest to said stack inlet.

5. (Original) An electrical isolation system in accordance with claim 1, wherein the selected one of said fuel cells is the fuel cell closest to said stack outlet.

6. (Original) An electrical isolation system in accordance with claim 1, wherein bipolar plates are provided between adjacent fuel cells, said bipolar plates physically separating said fuel cells, but providing an electrical connection between them.

7. (Currently Amended) An electrical isolation system in accordance with claim 6, wherein said ~~electrical~~ measuring circuit is adapted to measure the resistance between one of said bipolar plates and said chassis ground.

8. (Original) An electrical isolation system in accordance with claim 2, wherein bipolar plates are provided, said measuring circuit being connected to a bipolar plate at an inlet side of said fuel cell closest to said stack inlet.

9. (Original) An electrical isolation system in accordance with claim 3, wherein bipolar plates are provided, said measuring circuit being connected to a bipolar plate at an outlet side of said fuel cell closest to said stack outlet.

10. (Original) An electrical isolation system in accordance with claim 1, wherein said resistance measuring circuit is adapted to direct an alternating current between said selected one of said fuel cells and said

chassis ground and to effect said resistance measurement using said alternating current.

11. (Original) An electrical isolation system in accordance with claim 1, wherein said fuel cell stack has an associated electrical output system, at least one output terminal and a contactor for connecting each said output terminal to said electrical output system and said electrical isolation system further comprises a circuit monitor adapted to receive a value corresponding to said measured resistance, to effect a comparison with at least one pre-selected threshold and to initiate at least one of the following actions: (a) issue a warning, (b) disengage a said contactor, or (c) initiate a shutdown of said stack if said comparison is unfavorable.

12. (Original) An electrical isolation system in accordance with claim 1 and comprising a further circuit for measuring a potential difference between the selected one of said fuel cells and the chassis ground.

13. (Original) An electrical isolation system in accordance with claim 11, and comprising a further circuit for measuring a potential difference between the selected one of said fuel cells and the chassis ground, said circuit monitor being provided with an algorithm adapted to consider said potential difference in addition to said measured resistance when effecting said comparison.

14. (Original) An electrical isolation system in accordance with claim 13, wherein said algorithm is stored in said monitor as a software program.

15. (Original) An electrical isolation system in accordance with claim 12, wherein said potential difference measuring circuit comprises a low pass filter.

16. (Original) An electrical isolation system in accordance with claim 11 and further comprising at least one of a warning device, a display connected to said resistance measuring circuit to indicate the presence of a fault, a display connected to said resistance measuring circuit to display information concerning the fault, a display connected to said circuit monitor to indicate the presence of a fault and a display connected to said circuit monitor to display information concerning the fault.

17. (Original) An electrical isolation system in accordance with claim 11, said fuel cell stack further comprising at least one contactor present in an output lead connected to a high voltage output terminal of said fuel cell stack, at least one of said measuring circuit and said circuit monitor being adapted to disengage said contactor in the event of an unfavorable comparison indicative of a potentially dangerous fault.

18. (Original) An electrical isolation system in accordance with claim 1, wherein said fuel cell stack comprises at least first and second sub-stacks each having a respective set of coolant passages, said sub-stacks being connected electrically in series and said sets of coolant passages being connected in parallel, so that said fuel cell stack inlet feeds each of said coolant passage sets and said fuel cell stack outlet receives coolant from each of said coolant passage sets.

19. (Original) An electrical isolation system in accordance with claim 1, wherein said fuel cell stack comprises at least one metallic inlet stub forming said stack inlet and at least one metallic outlet stub forming said stack outlet, said at least one metallic inlet stub and said at least one metallic outlet stub being connected to said chassis ground.

20. (Original) An electrical isolation system in accordance with claim 1, wherein said fuel cell stack comprises at least one non-conductive

inlet stub forming said stack inlet and at least one non-conductive outlet stub forming said stack outlet.

21. (Original) An electrical isolation system in accordance with claim 1, wherein at least a part of each of said first coolant flow line connected to said stack inlet and a part of said second flow line connected to said stack outlet are non-conductive.

22. (Original) A method of monitoring a fuel cell stack comprising a plurality of fuel cells connected in series and a coolant circuit for cooling such fuel cells in operation using a liquid coolant having a restricted electrical conductivity, said fuel cell stack having an associated electrical output system, at least one output terminal and a contactor for connecting each said output terminal to said electrical output system and being associated with a chassis having a chassis ground, said fuel cell stack further comprising a plurality of coolant passages for said fuel cells, said coolant passages being connected together and said coolant circuit comprising an inlet for feeding said liquid coolant into said stack and into said coolant passages, an outlet for removing said liquid coolant from said stack after flow through said coolant passages, a radiator provided as a heat exchanger to cool said liquid coolant and having an inlet and an outlet, a first coolant flow line connecting said radiator outlet to said fuel cell stack inlet, a second coolant flow line connecting said stack outlet to said radiator inlet and a pump for circulating liquid coolant in said coolant circuit, wherein said coolant circuit comprises a plurality of conductive components and wherein at least one of said conductive components is connected to said chassis ground, the method comprising the steps of measuring a resistance between a selected one of said fuel cells and said chassis ground and effecting a comparison, directly or indirectly, between said measured resistance and at least one threshold value and, in the event of an unfavorable comparison, initiating at least one of the following actions: (a) generation of a warning

signal; (b) disengagement of a said contactor connecting a said output terminal of said stack to said electrical system; or (c) shutting down of said fuel cell stack.

23. (Original) A method in accordance with claim 22, wherein a potential difference is measured between said selected fuel cell and said chassis ground and wherein a monitor is provided which receives said measured resistance value and said measured potential difference, said monitor containing an algorithm for determining, in dependence on said measured resistance value and said measured potential difference, whether said fuel cell stack is operating satisfactorily or whether a malfunction is present and, in the event that a malfunction is present initiates at least one of the following actions: (a) triggering of a warning signal; (b) disengagement of a contactor connecting a said output terminal of said stack to said electrical system; or (c) shutting down of said fuel cell stack.

24. (Currently Amended) A method in accordance with claim 22, wherein said malfunction comprises any one of the following:

an incorrect value of the measured resistance indicating that an incorrect coolant has been used;

an incorrect value of the measured resistance indicating that said coolant has deteriorated in use;

an incorrect value of said measured resistance in combination with at least one of an incorrect value of said measured potential difference and of a current value calculated from said measured resistance and said measured potential difference, said change indicating that said fuel cell stack has been damaged, for example that a partial ground fault exists, for example within any one of said fuel cells or within another component, or in an external circuit electrically connected to said fuel cell stack;

an incorrect value of the measured resistance indicating that at least one connection to a chassis ground is defective or not correctly connected;

a change in at ~~lest~~ least one of said measured resistance in combination with a change in said measured potential difference and of a current value calculated from said measured resistance and said measured potential difference, said change indicating a variation in coolant passage geometry, for example due to an accident, or a kinked hose;

a change in said measured resistance in combination with a change in at least one of said measured potential difference and of a current value calculated from said measured resistance and said measured potential difference, said change indicating a grounding failure;

a change in said measured resistance in combination with a change in at least one of said measured potential difference and of a current value calculated from said measured resistance and said measured potential difference, said change indicating that a ground fault has occurred of a part of the electrical system of said fuel cell or an unintended resistive connection of an electrical circuit connected to said fuel cell has arisen, for example due to the presence of a foreign object, such as a tool, incorrectly placed or left in the environment of said fuel cell stack; or

a change in said measured resistance in combination with a change in at least one of said measured potential difference and of a current value calculated from said measured resistance and said measured potential difference, said change indicating that a flexible hose has failed, for example, due to electrical contact between said coolant and an electrically grounded metallic hose component due to leakage.

25. (Original) A method in accordance with claim 22 including the further step of activating a warning device in response to said warning signal.

26. (Original) A method in accordance with claim 22 including the further step of activating a display in response to said warning signal to display information related to a cause of said unfavorable comparison.